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M. L. Fernald (Rhodora 9:140-146. 1907), in a presentation of the genus Suaeda in northeastern America, recognizes 4 species and describes one as new (S. Richii).—G. F. Atkinson and C. W. Edgerton (Jour. Mycol. 13:185, 186. 1907; also Science N. S. 26:385, 386. 1907) have published a new genus (Protocoronospora) of fungi discovered infecting the cultivated vetch, and have published it in two journals without any evidence as to which publication is to be regarded as the original one.—C. H. Peck (Bull. Torr. Bot. Club 34:345-349. 1907) has described 12 new species of fleshy fungi, distributed among 8 genera.—E. Hassler (Bull. Herb. Boiss. II. 7:718-740. 1907), in continuation of his Plantae Paraguariensis, publishes a new genus (Paradolichandra) of Bignoniaceae.—L. Radlkofer (Leaflets Philippine Bot. 1:208-211. 1907) has published 4 new species of Sapindaceae from the Philippines.—J. M. C.

Movement of water.—DIXON adduces experimental evidence that EWART'S estimates it of the velocity of the transpiration stream and the resistances it encounters are vastly too great. EWART calculated from his data that it would require a head of water 6-33 times the height of the tree to drive a sufficient amount of water against the resistance encountered. According to DIXON'S data, with liberal allowances for transpiration, it would suffice to have a head equal to the height of the tree. As to the soundness of the cohesion theory of the ascent of water, against which EWART had brought his conclusions as objections, DIXON says: "Apart from the weighty evidence which has elsewhere been adduced in its favor, the fact that other theories, both old and new, have to assume properties for the waterways of plants which are either in the highest degree improbable or are even directly negatived by experiment, seems to support the theory by a process of exclusion."—C. R. B.

Light perception.—Another adverse report on Haberlandt's theory of the lens-function of the epidermal cells in the perception of light is rendered by Nordhausen.¹² Unlike Haberlandt, who obliterated the lens action by a film of water, and Kniep who reversed it by paraffin oil, Nordhausen used a film of 5-10 per cent. gelatin, whose refractive index is almost that of cell contents. (By making the gelatin opaque with lamp black he used it also to exclude light from the petiole, for which it is much superior to leather or paper.) He found that the clear gelatin did actually eliminate the lens action of the convex cells, and testing the ability of the leaf to respond to light in the very plants used

¹⁰ DIXON, H. H., On the transpiration current in plants. Proc. Roy. Soc. London B. 79:41-57. 1907.

ITEWART, A. E., Ascent of water in trees. Phil. Trans. Roy. Soc. London B. 198:41-85. 1905. Also, The resistance to flow in wood vessels. Annals of Botany 19:111. 1905.

¹² NORDHAUSEN, M., Ueber die Bedeutung der papillösen Epidermis als Organ für die Lichtperception des Laubblattes. Ber. Deutsch. Bot. Gesells. 25:398–410. 1907.